Born in Russia in 1889, Vladimir K. Zworykin has traced through the years a bright path in electronic research. He became a U.S. citizen in 1924. He has received numerous awards and, since 1954, he has been an honorary vice-president of R.C.A. Laboratories

My Most Exciting Moment

SELECTING THE BRIGHTEST or most stimulating experience in a long career is a task comparable to that of selecting the most significant single frame in a feature-length motion-picture film. Except in those rare instances when a Newton experiences a flash of genius at the drop of an apple, or when a Hillary stands for the first time at the summit of the world, our greatest moments are likely to become evident only in retrospect, gaining their special significance within the context of other events before and after.

Out of many such moments which come to mind over a 50-year span, my choice is an event which was almost casual at the time and has become truly exciting only in association with all that has followed. It is a moment of discovery, but one in which my role was that of the discovered rather than the discoverer.

The place was the Institute of Technology at St. Petersburg, Russia; the year was 1910. The setting is important to an appreciation of the event, for in that era and that environment a pattern of rigid formality prevailed in the relationship between student and faculty.

I had arrived at the Institute with a happy thirst for advanced technical knowledge. The required courses left time for anyone so inclined to devote after-hours to exploring new types of experimental equipment which many of us, including myself, saw for the first time as students at the Institute. It was my keen interest in one such device—a novel type of vacuum system—which led in my third undergraduate year to a chance meeting and an opportunity of inexpressible value.

My preoccupation with the new vacuum machine after class hours drew the attention of a shy, middle-aged assistant professor who dropped in from time to time to inspect our work. Over a period of weeks he watched my efforts, gradually extending both his friendship and his guidance. Then, one unforgettable day, he disclosed that he was undertaking something new in his own basement laboratory at the Institute—a series of experiments in which he required the help of a young assistant. Would I consider joining him to work after classes each day? I most assuredly would—and did.

The professor's name was Boris Rosing. Only after I had accepted his offer did I discover the exact nature of his private experiments. He had conceived of a new approach to the problem, then virtually unknown, of picking up images by electronic means for transmission to distant points. Through the door which he opened at that moment of invitation, I stepped with him into a new and challenging field, following a path that led ultimately to the iconoscope and to the birth of modern electronic television.

V. K. Zworykin